

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Nebraska Tractor Tests

Tractor Test and Power Museum, The Lester F.
Larsen

January 1937

Advertising Brochure: Oliver 70

Follow this and additional works at: <https://digitalcommons.unl.edu/tractormuseumlit>



Part of the [Applied Mechanics Commons](#)

"Advertising Brochure: Oliver 70" (1937). *Nebraska Tractor Tests*. 452.

<https://digitalcommons.unl.edu/tractormuseumlit/452>

This Article is brought to you for free and open access by the Tractor Test and Power Museum, The Lester F. Larsen at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska Tractor Tests by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

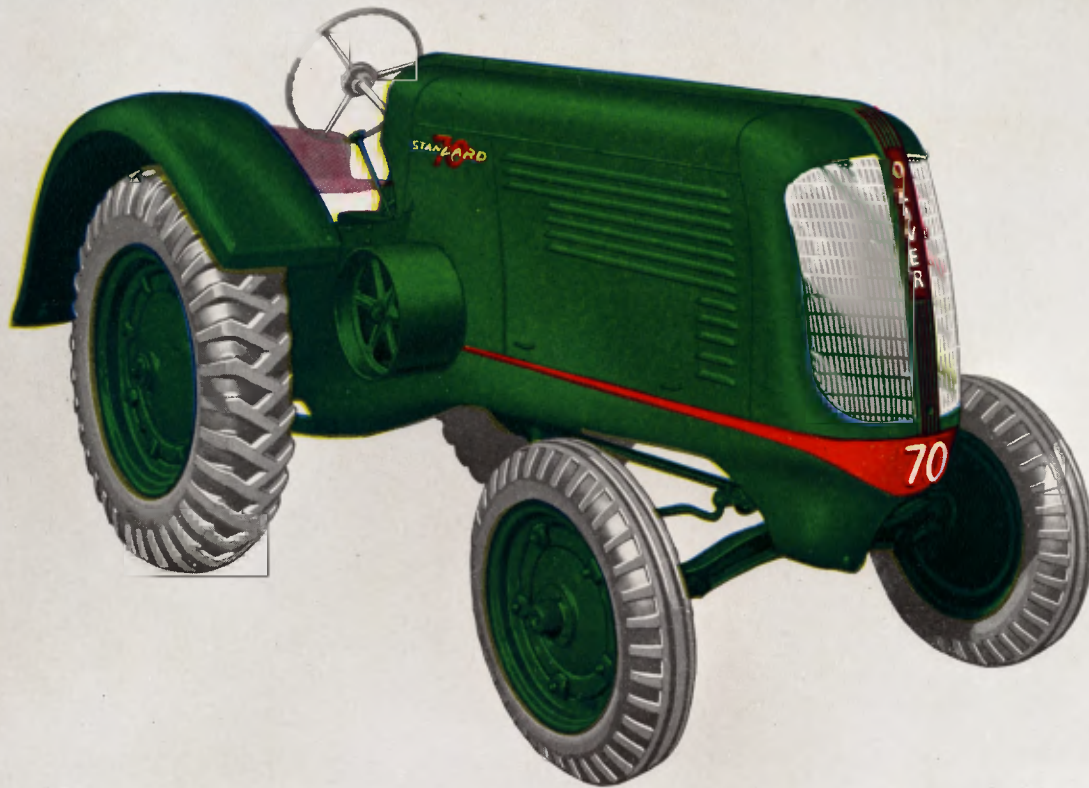


The
"70"

STANDARD
TRACTOR

MITCHELL, LEWIS & STAYER CO.
SPOKANE, ID. - SPOKANE

OLIVER



The Oliver Standard "70" Tractor with Rubber Tires and Cast Disc Wheels as Special Equipment.

Here is the tractor thousands of farmers had the good judgment to buy at first sight—that other thousands bought when they learned what they wanted in a tractor. For two years this Oliver "70" has been showing the world how good a four-wheel tractor can be.

It's more enduring than the toughest mule, faster than the finest plow span, more powerful than the best six-horse team. This Oliver "70" has smoothly sailed into the hearts of thousands of farmers by what it does for them and how it does it. Now, that famous performance and endurance have been given the beauty of a fine thoroughbred. Today, when you buy your Oliver "70," you get the neatest, sweetest performing power plant that ever turned a furrow PLUS looks that is worthy of its mechanical perfection.

The Oliver "70" literally has everything that you want in a tractor. Smooth, unflinching power from six husky cylinders. Performance that all tractor manufacturers know is ONLY possible with an engine designed especially for the fuel used. The "70" is nimble as a polo pony, handsome as a thoroughbred, as easy to drive as the family automobile and rides like a hammock on the road or in the field.

It does every farm job and does it well. You don't have to toughen it up in the spring before you swing into full speed in preparing your ground. Give it fuel, oil and water and it's ready to work day and night to get your crops in. You don't have to coddle it during the heat of summer. You won't find it leg weary and harness galled when you must get your fall work done before frost. And when you do not need it, there it stands ready, not eating its head off or demanding daily care. Because of its speed, pep and power you do your work faster, giving you more time to enjoy life. It turns the last furrow, or makes the last round of your fields at harvest time as unwearied as the day you start it out.

No matter what kind of power you are using now, investigate the "70"—modern power for modern farming. If you are mechanically minded check the specifications of the Oliver "70" against those of any other tractor.

See how much more you get than in any other tractor. If you prefer to judge on performance, ask for a demonstration—we enjoy them.

IT'S JUST GOOD JUDGMENT TO GET AN OLIVER STANDARD "70"

The Oliver Standard "70"

IT HAS EVERYTHING—IT DOES EVERYTHING—IT'S A BEAUTY

STREAMLINED SPEED, PEP AND POWER

The streamlined "70," on steel or rubber, is just as fast and just as full of lively power as it looks. The trim lines and lustrous lacquer finish are the outward evidence of the built-in compactness, easy accessibility to all parts, and high efficiency of engine and drive. S-m-o-o-t-h! That's the only way to describe the great 6-cylinder "70"—the only 6-cylinder tractor of its type. It's built just like an automobile with precision workmanship in every detail.

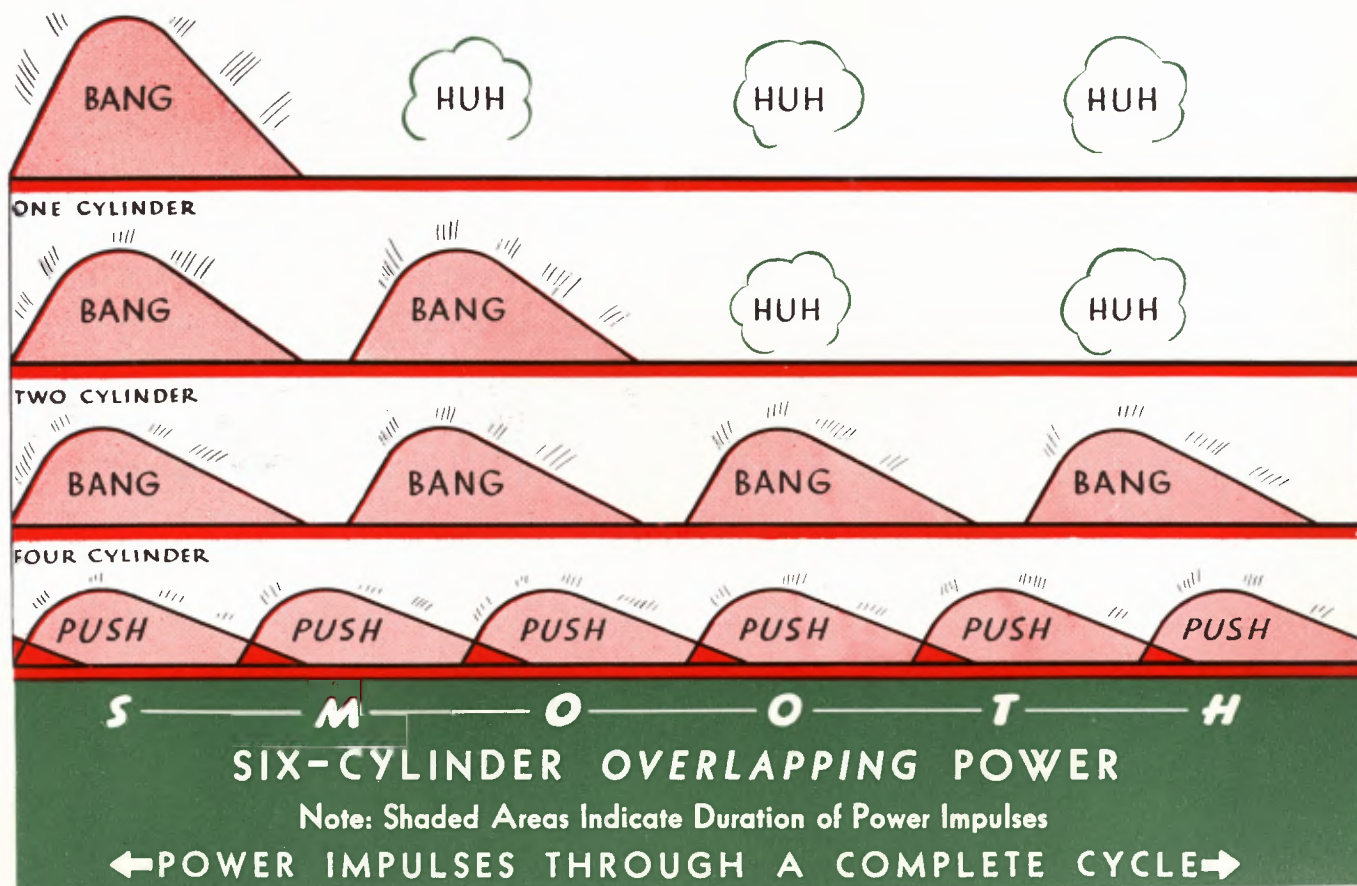
When the "70" was first planned, before a single line of design was drawn, Oliver engineers set out to build a tractor that would have all the features made available by modern automotive engineering, that would outperform and out-date all competition. How well they succeeded is shown by the world-wide acclaim and acceptance of the tractor that they drafted "out of to-

morrow" for today's farming needs—the Oliver Standard "70".

THE WHY OF "70" S-M-O-O-T-H-E-R POWER

The "70" engine—with its six cylinders, pours out a steady flow of overlapping power. There is always one cylinder working on the crankshaft, keeping it turning smoothly instead of waiting for it to come around to hit it another lick, as happens in a two- or four-cylinder engine. The 2¼-inch crankshaft of forged steel, fully balanced, accurately machined and ground to size, turns in four main bearings. This accurate running balance adds to the 6-cylinder freedom from whip and vibration of the "70".

THE EVOLUTION OF THE TRACTOR



The Oliver Standard "70"

IT HAS EVERYTHING—IT DOES EVERYTHING—IT'S A BEAUTY

BUILT IN TWO FUEL TYPES TO GET REAL PERFORMANCE AND FUEL ECONOMY FROM HIGH AND LOW GRADE FUELS

PICK YOUR FUEL AND YOUR "70"

Oliver is the first to build a line of tractors to meet modern conditions and provide real performance and full fuel economy on either high or low grade fuels.

You wouldn't expect your automobile to run very well if you filled it with gasoline today, and distillate tomorrow. Modern automobiles are not expected to do that. Why expect a tractor to do it? Every automotive engineer knows that no one type of engine will burn both high and low grade fuels with equal efficiency. Crankcase dilution is bound to occur when burning low grade fuels. The best all-fuel engine can never be more than a compromise. It can only get average performance from both high and low grades of fuel, and fails to get full power from either.

That's why Oliver has taken the latest developments of internal combustion engine design, and built them into two distinct types of "70" engines, the "70" HC and the "70" KD.

HIGH COMPRESSION

The development of gasoline with high octane rating (originally known as anti-knock fuel) made practical the use of the high compression engine for automobiles. To get the highest efficiency from present day quality gasoline a high compression engine is a necessity. The situation in regard to tractor engines is exactly the same.

If gasoline is the fuel, you need a high compression engine to get smooth power, maximum horsepower with economy, and instant response to the governor. This fuel is the "regular" gasoline supplied by your oil man or filling station. The "70" HC (high compression) engine makes it possible to take full advantage of the

maximum power available in today's quality gasoline in the same way as today's automobile engine does it.

If kerosene or distillate is the fuel, your tractor engine must have lower compression. Otherwise, it will overheat, knock, backfire, stall on hard pulls, and sputter around and even keep on exploding after the ignition is cut off. The "70" KD engine burns kerosene and distillate with the greatest power efficiency and economy.

If you want the finest all-around performance in a tractor today, choose the "70" HC for standard gasoline. If your local supply or gas-tax situation makes a heavy fuel tractor desirable, take the "70" KD. In either case you get a tractor that operates with greatest power and economy on the fuel you use. Only Oliver gives you that choice.

VARIABLE SPEED

Another reason why the Oliver "70" operates with such fuel economy is the variable speed governor. This is set to maintain a maximum engine speed of 1500 r.p.m. under normal operating conditions and functions automatically. But there is also a speed control at your finger-tips when you drive the "70." If you find that the tractor can easily "walk away with the load," you can cut the engine r.p.m. by instant governor adjustment, and shift to a higher transmission speed so that the tractor will maintain its rate of travel at lower engine speed but with open throttle—its most efficient operating point.

In this way, only the fuel needed to do the work is used. The "70" takes full advantage of the energy modern fuels produce. You get "one-plow tractor" fuel economy when pulling a "one-plow load."

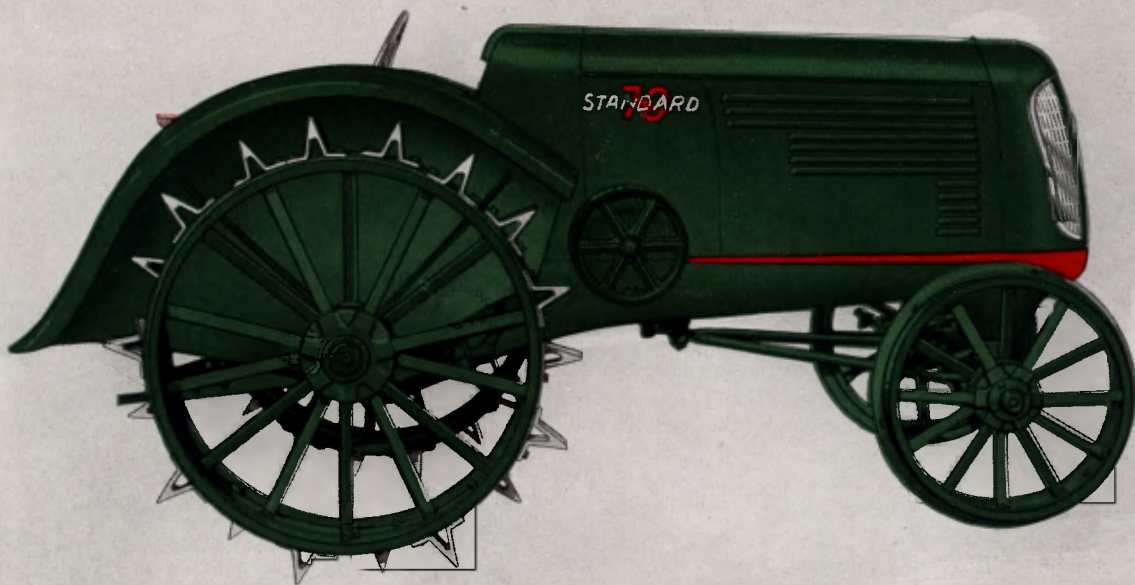
HC

**High Compression
for Gasoline**

70

KD

**For Kerosene
or Distillate**



The Standard "70" with Regular Steel Wheel and Lug Equipment.

GET THE TRACTOR THAT GIVES YOU THE MOST EFFECTIVE WORK OUTPUT—OLIVER STANDARD "70"

IT'S THE WORK DONE THAT COUNTS

Every experienced tractor operator knows the difference between a tractor "rating" and what a tractor will do in the field. There are two-plow tractors *and* two-plow tractors. So when you are looking for a tractor you want the one that gives you the *most effective work output*. By that test, you'll choose the Standard "70" because the "70" will do more work for you in a day at lowest cost, whether the work is pulling a two-base tractor gang at high speed, or any one of the many other drawbar or belt jobs. You can farm more acreage with the "70" and have more hours for leisure and recreation—*extra hours to live*.

LESS WEIGHT PER HORSEPOWER

In the Oliver "70" there's less fuel used in just moving the tractor around. Skilled use of high-grade metals in working out the remarkably compact "70" design is the reason. There's less weight per horsepower in both engine and chassis. Perfected weight distribution puts every pound to work, giving solid traction and stability.

"70" SPEED CHART

| | | |
|------------------------------------|---------------------|--|
| 1st | 2.44 Miles Per Hour | <div style="display: inline-block; vertical-align: middle;"> <div style="font-size: 3em; vertical-align: middle;">{</div> <div style="display: inline-block; vertical-align: middle; padding-left: 5px;"> All at rated engine speed of 1500 R.P.M. </div> </div> |
| *2nd | 3.32 Miles Per Hour | |
| *3rd | 4.33 Miles Per Hour | |
| #4th | 5.88 Miles Per Hour | |
| Reverse | 2.44 Miles Per Hour | |
| *—Plowing speeds #—Road speed | | |

REPRESENTATIVE PLOW CHART AT 2, 3 AND 4 M.P.H.

| PLOW | Width of Cut | Work Done per 10-Hour Day, 20 Miles Traveled at 2 M.P.H. "Horse" Speed, or "Low" Tractor Speed | Work Done per 10-Hour Day, 30 Miles Traveled at 3 M.P.H. Tractor Speed | Work Done per 10-Hour Day, 40 Miles Traveled at 4 M.P.H. Tractor Speed |
|---------------|--------------|--|--|--|
| 1 Bottom Plow | 12" | 2.42 Acres | 3.63 Acres | 4.84 Acres |
| 1 Bottom Plow | 14" | 2.82 Acres | 4.23 Acres | 5.64 Acres |
| 1 Bottom Plow | 16" | 3.24 Acres | 4.86 Acres | 6.48 Acres |
| 2 Bottom Plow | 18" | 3.64 Acres | 5.46 Acres | 7.28 Acres |
| 2 Bottom Plow | 24" | 4.85 Acres | 7.27 Acres | 9.70 Acres |
| 2 Bottom Plow | 28" | 5.65 Acres | 8.48 Acres | 11.30 Acres |

Plow Chart for the Standard "70" at its 3 Work Speeds

| | | | | |
|-------------------------------|-----|------------------------------|------------------------------|-------------------------------|
| 2 Bottom Plow Acres Plowed | 28" | at 2.44 M.P.H. 6.89 Acres | at 3.32 M.P.H. 9.38 Acres | at 4.33 M.P.H. 12.23 Acres |
|-------------------------------|-----|------------------------------|------------------------------|-------------------------------|

THE OLIVER STANDARD "70"—IT'S THE "6"

The Oliver Standard "70"

IT HAS EVERYTHING—IT DOES EVERYTHING—IT'S A BEAUTY

FINGER-TIP CONTROL AND RIDING COMFORT MAKE THE "70" A PLEASURE TO DRIVE

The "70" is almost as comfortable to drive as your automobile. The spring-and-hammock seat is easy on you. Every control is right at your finger tips. The large diameter, 3-spoke, automotive steering wheel with its easy grip, operates quickly and accurately through a steering gear consisting of a worm and sector of forged steel, with cut and hardened teeth, enclosed and running in oil. The steering shaft, mounted on high-grade roller bearings, has a take-up adjustment for wear which assures easy, responsive steering for the life of the tractor. The front wheel mounting is of the automotive type with center post steering, through drop forged steel knuckles and steering arms.

INDEPENDENT DIFFERENTIAL BRAKES ALSO AID IN STEERING

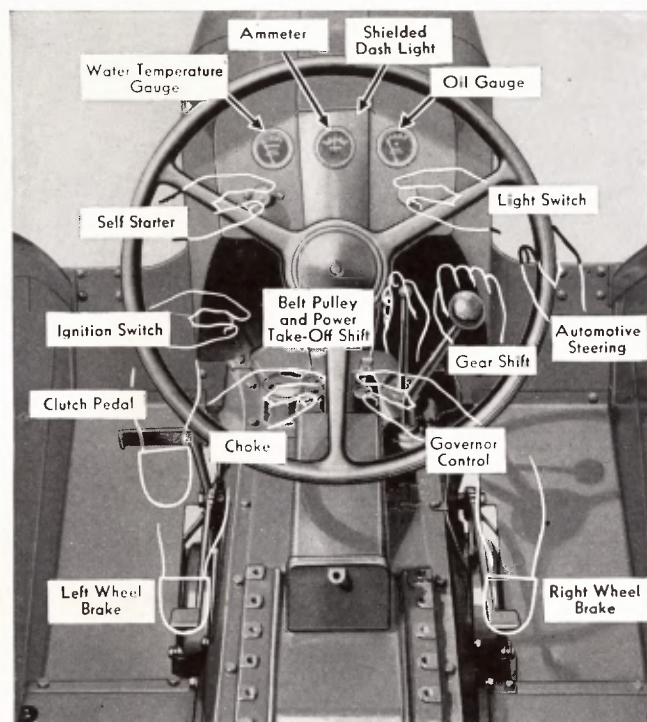
To add to the fast action of the positive, easily operated steering mechanism in making extremely short turns, the "70" has two durable brakes of the internal expanding type mounted at the outer ends of the differential shafts. When you flip the wheel for a sharp or an all-the-way-around turn, just set the brakes on the ground wheel on the side toward which you turn. The "70" turns in an 11½-foot circle.

On the turn back—just before you straighten out the front wheels—release the brake and you are off to a flying start, on a straight line.

The "70's" brakes also can be operated independently or both together from the foot pedals, all controlled from the tractor seat. The foot brakes operate from the heel, with powerful leverage and fast action. They can be locked to hold the tractor on a grade—or when it has been backed into the belt. The brakes are fully enclosed to protect them against dust and water.

Special Brake Attachment, consisting of a single brake pedal with necessary linkage for hooking up and operating both differential brakes at the same time, can be supplied as extra equipment. The use of this single pedal does not interfere with the standard individual brake pedals as they remain in position for individual foot operation.

6



Finger Tip Control of the Standard "70"

ELECTRIC STARTER AND LIGHTS

An electric starter with Bendix drive will be supplied on factory orders at slight additional charge. There's nothing like a starter to start you off on your day's work—no cranking at any time, especially on cold frosty mornings, or when you're starting and stopping. Just step on the starter and you're off with the "70".

TOOLS ARE LIGHTED, ALSO

Electric lights for night work are also available. The three lights fasten securely on the rigid Standard "70" fenders, two facing forward and one to the rear, in such position that both the tractor's path and the working tools are clearly lighted.

THE OLIVER STANDARD "70"—IT'S THE "6"



Everyone likes to drive the "70"—it handles like a modern automobile.

ON RUBBER TIRES OR STEEL THE STANDARD "70" DOES AN OUTSTANDING JOB

With its major job that of drawbar work the Standard "70" is provided with wheel equipment that takes full advantage of its lively, steady power.

If you want to enjoy the advantages of rubber tires on your Standard "70" and many farmers do, air tires are available as special equipment.

Many tests seem to prove that air tires put more of the motor's power at the drawbar, under normal operating conditions, cause the tractor to ride more smoothly, cut operating costs, cut down delay in moving from job to job and generally speed up farm work.

With a Standard "70" on rubber tires you can plow, fit the land and harvest crops at top speed. You can also move from location to location when threshing with absolutely no delay.

Owners advise that repair bills have been reduced because of the "cushion" which rubber gives the tractor,

and that the entire working life of the machine has been prolonged.

Standard equipment is steel drive wheels with spade lugs. Whichever you select, you will get outstanding results from your Standard "70" on rubber, or on steel.

HIGHER SPEEDS

Fifth and sixth speed gears and gear shift in addition to the four standard speeds are also available as special equipment. Fifth speed drives the tractor at a rate of 7.25 m.p.h. and 6th speed of 12.8 m.p.h. which gives a transport speed of approximately 14 miles per hour.

These higher speeds are built-in factory equipment and must be specified when ordering. They cannot be obtained individually as the 5th and 6th speeds are available only in combination.

Naturally they are more useful and suitable to rubber-tired equipment than to steel.

"70" POWER IS STEADY ON THE DRAW

Just as the Standard "70" furnishes steady unflinching power at the drawbar, it is equally useful in the belt or on power take-off work.

STEADY BELT POWER

The "70" convincingly proves its great capacity by easily operating a "hungry" 22 x 36 thresher, fully equipped with wind stacker, feeder and grain handler. The smooth flow of power from the six cylinders, and the high-grade built-in governor work together to enable the operator to deliver uniform belt speed and steady motion so important for threshing, hulling clover, silo filling, feed grinding and other belt jobs.

DETACHABLE BELT PULLEY— MOUNTED HIGH AND WELL FORWARD

The belt pulley is detachable. It consists of a compact, simple assembly. The pulley, well crowned to center the belt, is located high and forward on the right-hand side of the tractor. There is ample clearance for the belt.

STEADY "70" POWER DOES BETTER WORK ON POWER TAKE-OFF

The "70," when equipped with power take-off attachment, gives better field service than any tractor of its size and weight. Thus equipped, it is ideal for such jobs as operating a 2-row Corn Picker-Husker, Grain Master Combine or field Ensilage Harvester, power driven Grain or Row Binder, Pick-up Hay Baler, Potato Digger, Power Sprayer and the like. The power take-off attachment is quickly and easily installed. It is attached at the rear center of the tractor. It is lower priced—far lower than for most tractors and high in quality—mounted on antifriction bearings running in oil.

(1) SIX CYLINDER—VALVE-IN-HEAD ENGINE

The six-cylinder, valve-in-head engine of the Oliver "70" gives you great power—unusual durability—fuel economy and smoothness of operation—without unnecessary bulk and weight whether it is the "70" HC

8

**THE OLIVER
STANDARD "70"**



**ITS BIG QUIET POWER
SPEED AND POWER T**

The numbers printed in red below refer to tractor in the inside back cover. Pull

operating on gasoline or the "70" KD using kerosene or distillate. Bore and Stroke are $3\frac{1}{8}$ " x $4\frac{3}{8}$ ". Normal operating speed is 1500 r.p.m. The piston displacement is 201.34 cubic inches. Firing order is 1-5-3-6-2-4.

(2) **The Six Cylinders**, fitted with removable nickel iron sleeves, are ground and honed to a smooth and glass-like surface.

(3) **Pistons**, also of nickel iron, are carefully machined to exacting limits and accurate weight. Each is

AWBAR-BELT AND POWER TAKE-OFF—



WER PLANT GIVES
TO STANDARD "70"

*er to the big Cross-section view of the
ll it out and refer to it as you read.*

fitted with 3 plain rings and 1 oil ring—all above the pin. Size and fit are held to very close limits. *Piston Pins* are of the floating type. *Piston Pin Bearings* are renewable bronze bushings, practically 1 inch in diameter, $1\frac{1}{6}$ " long within the rod.

(4) Each Piston and Connecting Rod Assembly is carefully checked for weight and balance. The connecting rods are forged from special steel and accurately heat-treated and machined. Sets of connecting rods and

pistons are matched in weight for each engine. Vibration, friction and wear are reduced to a minimum.

(5) HEAT-RESISTING VALVES WORK AGAINST HARDENED INSERTS

"70" valves resist high temperatures under heavy loads without warping or undue wear. The exhaust valves seat against hardened inserts in the head. Grinding will be very infrequent. **Exhaust Valves** are of the latest design—size $1\frac{1}{6}$ "; lift $\frac{25}{64}$ ". **Intake Valves** are of high-grade nickel steel—size $1\frac{3}{8}$ "; lift $\frac{25}{64}$ ". **Valve Rocker Arms** are steel forgings operating on renewable bushings. Rocker arm sockets are hardened to resist wear from push-rod action. **Valve Tappets** are easily reached and adjusted. **Push Rods** are steel tubes with butt-welded solid ends hardened for long life. Cam action is transmitted to the valves noiselessly by mushroom valve lifters of the latest type. **The Camshaft** is a steel forging hardened and ground to size and shape. It operates in renewable bushings. The shaft is supported by four bearings.

(6) HUSKY COUNTERWEIGHTED CRANKSHAFT

The abundant power created in the six cylinders is carried to the "70's" transmission by the heavy forged steel four-bearing crankshaft. The shaft is fully balanced by integrally forged counterweights, accurately machined and ground to $2\frac{1}{4}$ " diameter size, then dynamically and statically balanced. It is drilled for pressure lubrication to all main and connecting rod bearings.

(7) LONG-WEARING CRANKSHAFT AND CONNECTING ROD BEARINGS

The "70" main crank bearings are of the latest precision type, steel back, cadmium-nickel lined, accurately fitted to the crankshaft.

Connecting Rod Bearings of latest precision type are also of steel, cadmium nickel lined. All bearing shells are renewable. The bearing cap, held solidly in place by two special connecting rod bolts with slotted nuts, will not work loose.

IT'S THE "6"



The Oliver Standard "70" speeds the work of seedbed preparation.

MODERN FUEL, IGNITION, LUBRICATION, AND COOLING SYSTEMS ALWAYS DEPENDABLE

(8) SEDIMENT-FREE FUEL SYSTEM

The fuel strainer and removable sediment bowl between tank and carburetor are provided to prevent clogging and delays. Fuel feed is by gravity. Capacity of the main tank is 15 U.S. gallons in the "70" HC and "70" KD. The auxiliary (gasoline) tank, in the "70" KD holds 1 U.S. gallon.

(9) CARBURETOR

The carburetor is of rugged cast iron construction for long life. It is accurately calibrated for most economical operation, and delivers the correct fuel mixture for all speeds and loads.

(10) RELIABLE OIL-WASH TYPE AIR CLEANER

Foreign matter is kept out of the motor by this simple, efficient, oil-wash type air cleaner. It is cleaned in a few minutes and has an easily accessible oil cup for removing accumulated dirt. The cup can be refilled with old or new engine oil. There are no moving parts and nothing to freeze or wear out. The air intake is placed at the top of the radiator. Only the cleanest and coolest air is drawn in.

(11) HELICAL-CUT TIMING GEARS

Helical-cut timing gears accurately control motor ignition.

(12) DEPENDABLE IGNITION

High-Tension Induction type magneto is self-lubricated. The spark is fixed and timed for maximum efficiency of engine for all speeds and under all conditions. The magneto is flange mounted and the impulse coupling is positively sealed against dust and moisture.

(13) VARIABLE SPEED GOVERNOR

The variable speed governor built into the engine is controlled by a convenient hand lever to change engine speed. The superior governor is fully enclosed, automatically lubricated.

(14) MUFFLER

The modern automotive type muffler effectively silences exhaust noise while permitting full power output.

The Oliver Standard "70"

IT HAS EVERYTHING—IT DOES EVERYTHING—IT'S A BEAUTY

In the Heat of Summer or in Dead of Winter, the Standard "70" Works Dependably, Making Money the Year Around

FORCE FEED LUBRICATION

The Oliver "70" force feed pressure oiling system provides correct lubrication with real oil economy. It assures a motor that is always in better working condition and adds years to the tractor's working life.

(15) Full Pressure Lubrication is provided to all main bearings, connecting rod bearings, camshaft bearings, and valve rocker arm bearings. In addition, the pressure system provides oil feeds to the timing gears, governor drive, magneto drive, water pump and fan-shaft. The oil pump driven from the camshaft is located in the sump near the center of the crankcase. A relief valve protects this force feed system against damage from excessive pressure.

(16) The Oil Filter is of the improved type with replaceable filter element. It removes sludge, grit or metallic sediment from the oil before it reaches the working parts of the engine. The "70" is lubricated with clean oil.

Oil Capacity is $1\frac{1}{4}$ gallons in crankcase. Crankcase oil pan is easily removed for access to and adjustment of connecting rod bearings. An oil level indicator of the bayonet type indicates the amount of oil in the crankcase. Oil used in engine for temperatures above freezing is SAE No. 30—below freezing, SAE No. 20.

THE COOLEST WATER TO THE HOTTEST PART

In the "70", the coolest water in the system is drawn

from the bottom of the radiator, and pumped under pressure to the top of the motor, across the hottest part around the valves, valve stems, spark plugs and combustion chambers.

MEANS REDUCED OPERATING COSTS

In operation, "The Coolest Water to the Hottest Parts" mean: (1) More power developed from the fuel and lower fuel cost. (2) Better lubrication and lower oil cost. (3) Better operation and added years of tractor life.

(17) RADIATOR AND GRILLE

Radiator Core is of the tubular type with fins, all of copper. The removable pressed steel shell is of exclusive Oliver design and shape. The highly finished removable grille serves as a trash screen and at the same time adds to the automotive streamlined appearance. Cooling system capacity is $4\frac{1}{2}$ gallons. An adjustable radiator curtain is furnished as standard equipment.

(18) WATER PUMP AND COOLING FAN

Water Pump is of the impeller type with patented water pump seal and automatic take-up. Water pump bearings are automatically lubricated and require little attention. The four-blade steel, 16" diameter cooling fan is driven at a speed of 2375 r.p.m.

V-Belt Fan Drive is direct from the crankshaft to pump and fanshaft. The fan pulley is adjustable for tightening the belt.

Small grain put in with this outfit means faster accurate planting.

11



The Oliver Standard "70"

IT HAS EVERYTHING—IT DOES EVERYTHING—IT'S A BEAUTY

RUGGED, EFFICIENT TRANSMISSION PUTS "70'S" SMOOTH, FLEXIBLE POWER TO WORK

The steady flow of power from the six cylinders of the "70" is put to work through a smooth, rugged transmission (19) built to automotive standards of quality. It is controlled by a conveniently located, easily operated shifting lever.

(20) EASILY OPERATED— LONG-LIVED CLUTCH

The sure-acting "70" clutch is easily operated by a slight pressure on the foot pedal. It is simple and long-lived, of the single-plate dry type, and spring loaded.

When, after long service, it needs refacing, it is easily removed and easily put back.

LONGER-WEARING GEARS AND SHAFTS

For extra strength and longer life the Oliver gear train is built up with sliding spur gears (21), cut from solid chrome-nickel steel, carburized and hardened. All shafts (22) are heat-treated and mounted on high-grade ball or roller bearings.

FINAL DRIVE

Final drive to the rear wheels is through a straddle mounted spiral bevel pinion (23), a forged steel differential (24) with spiral bevel ring gear and pinions. Differential shaft bull pinions (25) are of forged steel, carburized and hardened. They mesh with forged steel, carburized and hardened, master gears—securely mounted on extra strong, live rear axles (26).

The Standard "70" with Spike Tooth Harrow.



(27) TRANSMISSION LUBRICATION

Oil distribution for all transmission gears is automatic—whether the tractor is traveling on steep grades or on level ground. Transmission oil capacity is 7 gallons for initial filling. One opening located in the top transmission cover serves for filling both compartments. Oil level plug at the rear indicates height of oil in transmission case. Oil recommended for transmission is SAE No. 160 in summer, SAE No. 90 in winter.

EVERY PART OF THE "70" IS EASILY ACCESSIBLE FOR NECESSARY OPERATING ADJUSTMENT

The easy-to-get-at design of the "70" is of great importance to every owner—not because he will have to do much service work on this rugged job—but rather because he can quickly and easily make slight adjustments and minor corrections that might develop into expensive trouble were it not for the great accessibility.

(28) VALVES IN HEAD

The valves are easy to get at for adjustments without removing the head. With hardened inserts for the exhaust valves there will be little need for valve grinding.

(29) MOTOR BEARINGS

The entire set of connecting rod bearings and main bearings is easily reached by removing the oil pan which forms the bottom half of the crankcase.

(30) TRANSMISSION

The tops can be removed from the mid-section of the transmission housing to give easy and complete access to transmission, differential, pulley drive and power take-off.

(24) INDEPENDENT BRAKES

The fully-enclosed independent differential brakes are of the internal expanding type. They have convenient external adjustment and are easily removed for servicing or relining.

THE OLIVER STANDARD

The Oliver Standard "70"

IT HAS EVERYTHING—IT DOES EVERYTHING—IT'S A BEAUTY

**FOR ANY KIND OF WORK OR ANY TYPE SOIL
AT ANY TIME DAY OR NIGHT—THE "70"**

WIDELY ADJUSTABLE DRAWBAR

The sturdy drawbar (36) of the Standard "70" is of the adjustable, swinging type and attaches securely to the lower, rear part of the transmission housing. It is located well below the power take-off connection and provides plenty of clearance when power take-off attachment is used. A vertical adjustment range of from 9" to 18" above the ground, and a lateral adjustment of 18", provide a correct hitch for every drawbar job.

BELT PULLEY AND POWER TAKE-OFF

Both the belt pulley and power take-off are driven from a special clutch (31). The drive is by spiral bevel gears (32) running in oil.

The belt pulley attachment is standard equipment. It consists of a simple, compact assembly and is removable. Pulley diameter, 12 $\frac{3}{4}$ ". Face, 7 $\frac{1}{4}$ ". Rotation is clockwise; speed, 778 r.p.m. at regular 1500 r.p.m. engine speed. Belt speed, 2600 feet per minute at 1500 r.p.m.

The power take-off attachment (33) consists of a shaft with bearings. Rotation is clockwise—speed, 536 r.p.m. The six splined end is the standard 1 $\frac{3}{8}$ ". This attachment is special equipment, but the connection is built-in so that the device can be installed easily at any time.

STEERING GEAR IN OIL

The worm and sector steering gear (34) also runs in oil in a separate oil-tight compartment. It is semi-reversible to eliminate wheel-fight. 18" automobile type steering wheel.

DROP FORGED AXLE AND STEERING ARMS

The front axle, knuckles and steering arms (35) are drop forged for greater strength. Center steering permits compact construction and protects steering mechanism.

COMFORTABLE DRIVER'S SEAT

A spring-and-hammock type driver's seat (37), with durable heavy duck slip cover, gives greater riding comfort.

STURDY STREAMLINED FENDERS

The "70's" fenders (38)—attractively streamlined in appearance and exclusively Oliver in design—protect the operator and are amply strong to withstand hard service.

COMPLETE WHEEL EQUIPMENT

Offered with wheel and lug equipment to develop and utilize full power, the Standard "70" will meet all field and road-work requirements. The tractor is regularly equipped with flat rim steel front wheels, with skid bands and with steel drive wheels, each drive wheel having 20 standard, 3" wide, 4 $\frac{1}{2}$ " high spade lugs. Lugs are firmly held in place by means of two bolts. Special, extra high, two-bolt spade lugs, angle iron lugs, cone lugs, extension rims, overtires and rubber tires with cast disc wheels are also available.

BUILT FOR OUTSTANDING PERFORMANCE

The compactness of the Oliver Standard "70", its easy handling, steady power, convenience and accessibility make it the finest tractor of its size and type in existence today. It has been engineered and built from the ground up to do big work at low cost. It is a notable addition to the Oliver Tractor line—the tractor line that has always given the most power, for the longest time, at the lowest cost.

An Oliver Roller Pulverizer drawn by the "70".



"70" — IT'S THE "6"

The Oliver Standard "70"

IT HAS EVERYTHING—IT DOES EVERYTHING—IT'S A BEAUTY

WHEEL AND LUG EQUIPMENT FOR EVERY TYPE OF SOIL

The final power of the tractor comes from its traction—the ability to get sure footing that will put its full power to work. In Oliver Standard "70" wheel equipment you will find the equipment needed in your territory for all soils and seasons.

Your Oliver Dealer or Blockman will be glad to assist you in selecting the type of equipment to develop the utmost of the "70's" great delivered drawbar power.

FRONT WHEELS

Standard Steel Wheel—Flat Rim Steel Front Wheel with skid band, 27" in diameter, $4\frac{1}{2}$ " face.

Rubber Tire Wheel—Cast Steel Front Wheel with Rubber Tire; demountable drop center rim. Tire Sizes, 5.50-16 or 6.00-16, optional.

REAR WHEELS

Wheel No. 1—Standard wheel with 10" rim, equipped with cone lugs, two rows. Lugs are $2\frac{1}{2}$ " high. Used to best advantage on dirt roads, in hay fields and meadows, also on frozen or icy ground.

Wheel No. 2—Standard wheel with 10" rim equipped with $13\frac{1}{4}$ " angle iron lugs, 12 per wheel, $\frac{3}{8}$ " wide

face, $2\frac{1}{2}$ " wide at base, $3\frac{1}{2}$ " high, $13\frac{1}{4}$ " long. Satisfactory under all normal conditions, especially in light or sandy soil.

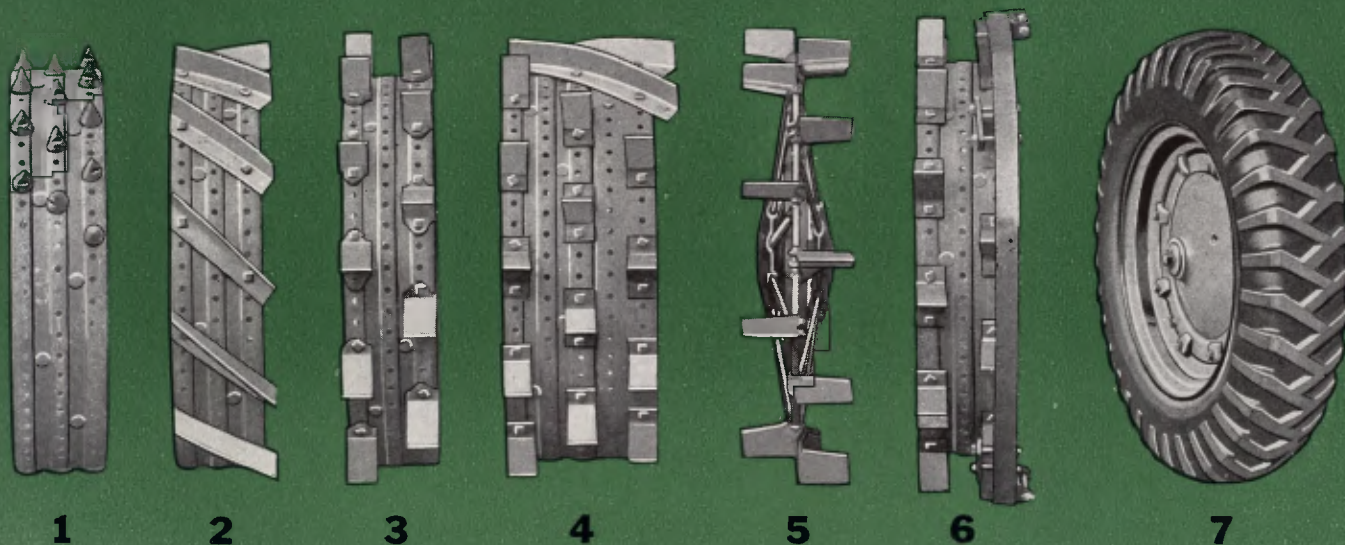
Wheel No. 3—Standard wheel with 10" rim equipped with 5" 2-bolt steel spade lugs. There are 20 lugs per wheel.

Wheel No. 4—Standard wheel with 10" rim with 6" extension rim equipped with 3 rows of standard 2-bolt spade lugs $4\frac{1}{2}$ " high. 30 lugs per wheel. There is also shown on wheel No. 4 the $20\frac{3}{4}$ " angle iron lug for sandy or soft loam soil and road work; 12 lugs per wheel.

Wheel No. 5—This is a Tip Toe Wheel 46" in diameter equipped with a set of $4\frac{1}{2}$ " offset lugs, 20 per wheel. Secure ample traction under ordinary circumstances and use. Gives a wheel 9" wide with non-packing soil features.

Wheel No. 6—Standard wheel with 10" rim equipped with standard $4\frac{1}{2}$ " 2-bolt spade lugs with overtires. Overtire is used when tractor must be run on concrete or hard surface road.

Wheel No. 7—Cast Steel Rear Wheel with Rubber Tire; demountable drop center rim. Tire sizes: 9.00-24 or 11.25-24 optional.

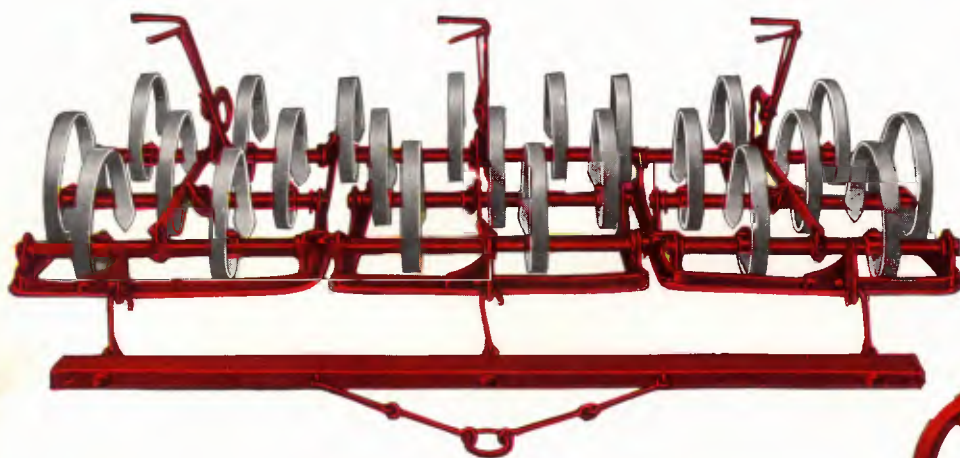


OLIVER TOOLS AND THE STANDARD "70"



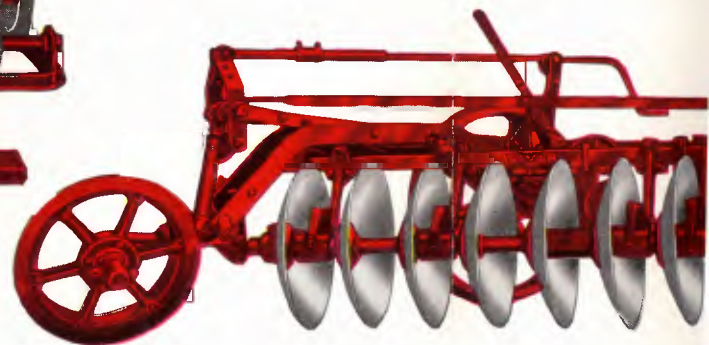
Disc Harrows of All Types for All Purposes

Tractor Moldboard Plows

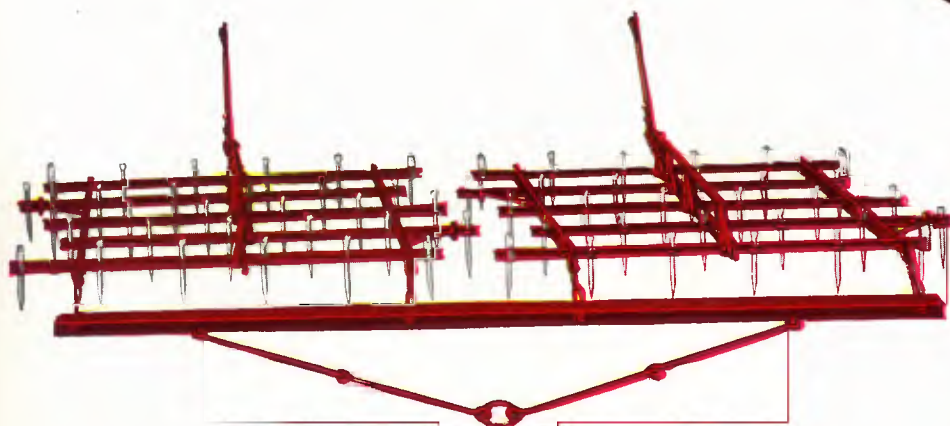


Spring-Tooth Harrows

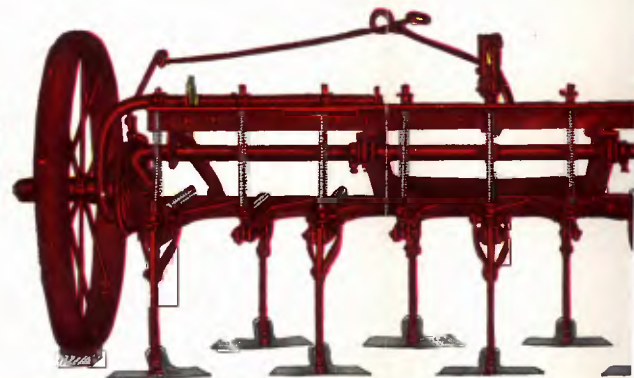
Tractor Disc
One-Way Disc



Duck-Foot and Spring-Tooth For
Field Cultivators and Special Ti



Spike-Tooth Harrows— Open and Closed End,
Folding Pipe Bar and Zig-Zag Types



THE "70" IS ALSO BUILT IN ROW CROP "70"

**AT
THE END OF
THE DAY...**

Tired? Sure! When you finish a day on your Standard "70" you're naturally tired from a big, healthy day's work well done. But you're not worn to the breaking point by shaking and vibration—you can clean up the chores with vim and have strength to enjoy an evening of recreation. "70" 6-cylinder s-m-o-o-t-h-n-e-s-s smothers the vibration that wears on both man and machine.



J U S T D R I V E T H E " 7 0 " A N D S E E

Just drive the Oliver Standard "70" once. Settle back at ease in the comfortable spring-and-hammock seat. Every control is right at your finger tips. Step on the starter. Drive it off. The "70" is as easy to handle as your automobile. Feel the flow of rushing, surging power

that carries you down the field smoothly, quietly. It's a sensation that you'll get in no other tractor—the feel of lively, willing power. Drive any other tractor. Then drive the Oliver Standard "70" on the same job—you will never be satisfied with anything else.

Before You Buy Any Tractor
DRIVE THE OLIVER STANDARD "70"